# 15W POLO bulkhead

## Data Sheet

New ERP

**For Series: OT-HPB01**

Dear partners,

* Thanks for Choosing OTC LED bulkheads for your projects.

OTC always pursue high quality, steady quality products, competitive price and one-stop customer service, and offer enjoyable installation experience.

* All the OTC bulkheads with 5 years quality guarantee (Battery 3 years) . If any doubts/ questions, please contact OTC project support team directly by email support@otcind.net . You will get solutions in 7~24 hours rapidly.

## Contents

## 1  Security relate information

• Installation should be carried out in accordance with the latest edition of the I.E.E. Wiring regulations and taking into consideration the latest building regulations.

• Ensure that all electrical connections are tight with no loose strands, including factory made connections.

• Ensure there is adequate free air circulation of at least 100mm around the luminaire. It is the installer's responsibility to consider fire risk and take appropriate precautions.

•A seperate enclosure may be required if this unit is to be used in dusty and wet environments.

Q.C. date label, installation in an improper working environment or installation not according to the current edition of the I.E.E. Wiring Regulations . The guarantee is also invalidated if the luminaire has been I.R. tested. Should this product fail during the guarantee period it will be replaced free of charge, subject to correct installation and return of the faulty unit. We do not accept responsibility for any installation costs associated with the replacement of this product.Your statutory rights are not affected. We reserve the right to alter specifications without prior notice.

## 2  Packing list



Installation pack *1



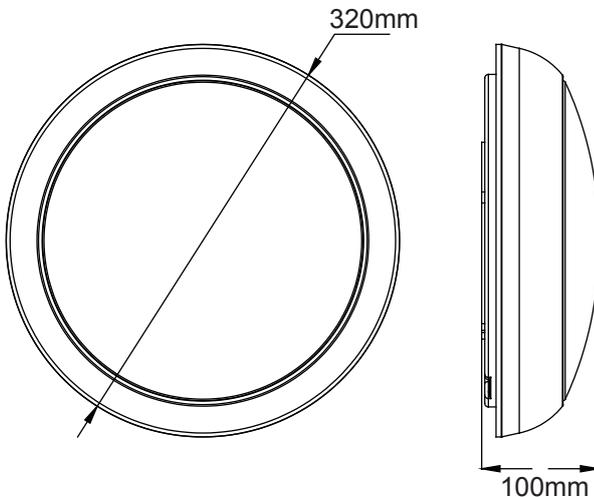The  Lamp *1

User manual *1

Remote cotroller *1
(Only remote test version)

INNOVATING YOUR PROJECTS

## 3  Basic Parameters

| Model | Art Nr. OT–HPB01 | | | |
|---|---|---|---|---|
| | 96 | 96MC | 96E–ST | 96EMC–ST |
| Material | polycarbonate | | | |
| LED Chips | 96  pcs 2835 | | | |
| Luminous Flux(Mains) | 1500LM | | | |
| Color Rendering Index | >80 | | | |
| CCT | 3000/4000/6000 available | | | |
| Degree of protection | IP65 | | | |
| Input Voltage | AC90–260V 50/60HZ | | AC200–240V 50/60HZ | |
| Input power (Mains +EM) | 15W | 15W | 15+2W | 15+2W |
| Power factor | >0.9 | >0.8 | >0.8 | >0.8 |
| Warm up time | <1S | | | |
| LED lifespan | 50,000 hrs | | | |
| Beam angle | 120° | | | |
| Sensor & Corridor function | NO | With | NO | With |
| Emergency Pack | NO | | 12 V 1.0Ah,  Ni–Cd | |
| Self & remote test | NO | | With | |
| Emergency time / LM | NO | | 3 hours / 120Lm | |

320mm

100mm

| | | |
|---|---|---|
| **Input** | Operating Voltage Rage | 198-264V AC, 50Hz/60Hz |
| | DC Input Voltage | N/A |
| | Rated Voltage | 220-240V AC, 50Hz/60Hz |
| | No-load Power | N/A |
| | Stand-by Power | ≤0.5W |
| | Surge Test | L--N: 1kV |
| **Output** | Working Mode | ON/OFF function |
| | Type of Load | Inductive or Resistive Load |
| | Load Capacity | 400W(Inductive) ; 800W(Resistive) |
| | Current of Load | N/A |
| | Max. Surge Capacity | 30A (50% Ipeak, twidth =500uS, 230Vac full load, cold start); 60A (50% Ipeak, twidth =200uS, 230Vac, full load, cold start ) |
| **Dim Interface** | 1-10V Dimming | N/A |
| | Synchronous Control | N/A |
| | High Low-level | N/A |
| | PWM Control | N/A |
| **Sensor Parameters** | Operating Frequency | 5.8 GHz ±75 MHz, ISM Band. |
| | Transmitting power | 1mW Max. |
| | Hold time | 5S/30S/90S/3min/20min/30min(set via 3 DIP switch) |
| | Stand-by DIM Level | N/A |
| | Stand-by Period | N/A |
| | Detection Area | 100%/75%/50%/25%/10%(set via 3 DIP switch) |
| | Daylight Sensor | 2lux/10lux/25lux/50lux/Disable (set via 3 DIP switch) (Ambient diffusion status) |
| | Daylight on/off | N/A |
| | Detecting Radius | 4-6m (mounting height 3m) |
| | Mounting Height | 6m Max |
| | Detecting Angle | 150° |
| **Wireless Module** | Operating Frequency | N/A |
| | Transmitting power | N/A |
| | Transmitting distance | N/A |
| | Modulation mode | N/A |
| | Number of coding | N/A |
| **Operating Environment** | Operating Temperature | -20℃…+60℃ |
| | Storage Temperature | -40℃…+80℃ Humidity: 10%-95% (Non-condensing) |
| **Certificate Standards** | Safety standards | EN61058-1, EN61058-1-2 |
| | EMC standards | EN300440, EN301489-1, EN55015, EN61547, EN61000-3-2 EN61000-3-3, EN62479 |
| | Environmental Requirement | Compliant to RoHS |
| | Certificate | CE,TUV, RED |
| **Others** | Wiring | Press-in Type Terminals, wire diameter:0.75-1.5mm$^2$ |
| | IP Rating | IP20 |
| | Protection Class | Class II |
| | Installation | Built-in |
| | Dimension | 77*36*25.6mm |
| | Package | Bubble bag+Clapboard + Carton(K=A) |
| | Net Weight | 41.0g |
| | Lifetime | 5 years warranty @Ta 230V full load |

Note

1. "N/A"means not available.

2. Detection area is effected on volume of motion object and motion speed. The detection area is tested by a 165cm height person and walking speed is 0.5m/s.

**Description**

### On/OFF Function



① With sufficient ambient light, the light will not be switched on even if with motion signal.

② With insufficient ambient light, the sensor switches on the light when motion is detected.

③ After elapse of hold time, the sensor switches off the light when no motion is detected.

# DIP Switch Setting



Detection Area (Sensitivity)

|     | 1   | 2   | 3   |      |
| --- | --- | --- | --- | ---- |
| I   | ON  | ON  | ON  | 100% |
| II  | -   | ON  | ON  | 75%  |
| III | ON  | -   | ON  | 50%  |
| IV  | -   | -   | ON  | 25%  |
| V   | -   | -   | -   | 10%  |

Hold Time

|     | 4   | 5   | 6   |       |
| --- | --- | --- | --- | ----- |
| I   | ON  | ON  | ON  | 5S    |
| II  | -   | ON  | ON  | 30S   |
| III | ON  | -   | ON  | 90S   |
| IV  | -   | -   | ON  | 3min  |
| V   | ON  | ON  | -   | 20min |
| VI  | -   | -   | -   | 30min |

Daylight Sensor

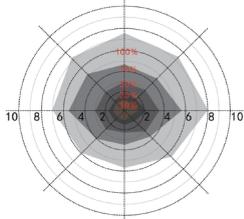|     | 7   | 8   | 9   |          |
| --- | --- | --- | --- | -------- |
| I   | ON  | ON  | ON  | 2Lux     |
| II  | ON  | ON  | -   | 10Lux    |
| III | -   | ON  | -   | 25Lux    |
| IV  | ON  | -   | -   | 50Lux    |
| V   | -   | -   | -   | Disable* |

# Radiation Pattern

Ceiling mounting

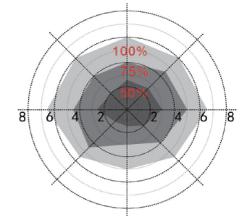Ceiling mounted height: 3m
Sensitivity: 100%/75%/50%/25%/10%
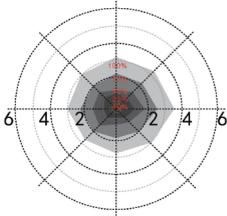
Ceiling mounted height: 6m(*)
Sensitivity:100%/75%/50%
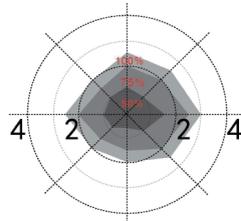
Normal moving (Speed:1m/s)
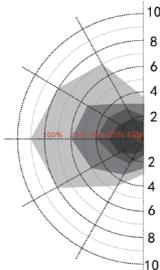
Normal moving (Speed:1m/s)

Slow moving (Speed 0.3m/s)
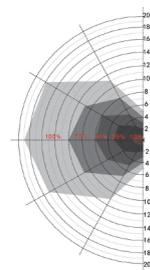
Slow moving (Speed: 0.3m/s)

*50%,75%,100% detection sensitivity is workable when installed at 6m mounting height. Only 10%,25% sensitivity is not able to detect motion signal.

Wall mounting:

Wall mounted height: 2m
Sensitivity: 100%/75%/50%/25%/10%

Normal moving (Speed：1m/s)

Slow moving (Speed 0.3m/s)

## 6 Emergency function (96E-ST &96EMC-ST only)

| Emergency Technical Data | |
|---|---|
| Battery Type | Ni-CD 12V 1.0Ah |
| Battery Charging | 60mA，Charging >90% in 24 hours |
| Discharging | 200mA，>3hours autonomy time |
| Test Button | Included |
| Self-test | Included |
| Charging Indicator | Green LED |
| Faulty Indicator | RED LED |
| Remote test | Included |
| Standard | IEC60598-2-22:2014 |

### ADDITIONAL INFORMATION - COMPONENT REPLACEMENT

• The luminaire contains no user replaceable components other than the battery pack contained in emergency versions.

• The battery has a 4 year service life provided it is operatedand & maintained by regular testing, as detailed in this Usermanual. Failure to maintain or change the battery may result in reduced duration in emergency mode.

# Emergency function test before installation

1. Connect the AC cable according to the Dia 1. Keep the Switch Live off, and battery plugged on.
   (The green charging indicator on，Faulty indicator off)
2. Press the test button, The charging indicator off, and emergency function actived
3. Unplugged the battery, charging indicator OFF，the faulty indicator flash in 1HZ.

Netural

Earth

Switch live
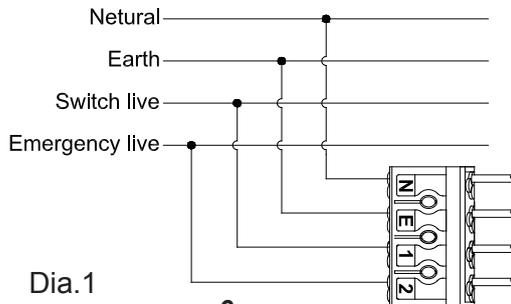
Emergency live

Dia.1

### 7.1 Testing (If no failure)

7.1.1. Manual function test.
Active the ④ test button.
or press "TEST" switch on controller.

a) The ② Charging indicator OFF.
b) The Emergency function ON.
c) The test will cut off the mains (15W)

7.1.2 Monthly test.
Active the ④ test button for 5 second;
or press the "Monthly TEST" switch on controller;
or the lamp installed every 30 days.

a) The ② Charging indicator will flash in 1HZ for 128s;
b) The Emergency function ON;
c) The test finished and back to standby mode.

7.1.3 Annual test.
Active the test button ④ for 7 second;
or press the "Annual TEST switch on controller;
or the lamp installed every 180 days.

a) The ② Charging indicator will flash in 2HZ for 3hours;
b) The charging will be cut off & emergency function ON 3hours;
c) The lamp back to standby mode after test.
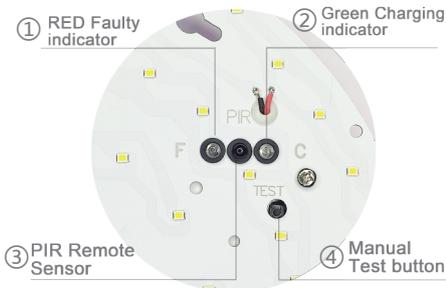


Remote test controller

## 7.2 Testing（If any failure）

### 7.2.1 Battery failure:
Monitored constantly. The faulty indicator will falsh in 1 Hz if the battery failure any time.

### 7.2.2 LED load failure:
If press test button, or the luminary self–monthly test. The faulty indicator will falsh in 2 Hz if LED load failure.

### 7.2.3 Duration failure:
Only in Annual self–test. The faulty indicator will turn on constantly if the Battery can not last 3 hours

## 8 Emergency control logic(96E &96EMCST only)

### The emergency function control logic

| Operation | Charging indicator | | Faulty Indicator | | Emergency LED | |
|---|---|---|---|---|---|---|
| Time line | 1 Second | 1 Second | 1 Second | 1 Second | 1 Second | 1 Second |
| Normal charging | Constantly on | | OFF | | OFF | |
| Normal AC Failure | OFF | | OFF | | Constantly on | |
| Manual test | OFF | | OFF | | Constantly on | |
| Monthly self-test | ⬤ | ⬤ | OFF | | Constantly on | |
| Annual self-test | ⬤ | ⬤ ⬤ ⬤ | OFF | | Constantly on | |
| Battery circuit failure | OFF | | ⬤ | ⬤ | OFF | |
| Light source failure | Constantly on | | ⬤ ⬤ | ⬤ ⬤ | OFF | |
| Duration test failure | Constantly on | | Constantly on | | Depends on AC supply | |

**Before**          **After**

**No Key switch, No Harry, No ladders**
**Safe / Easy / Convenient**

INNOVATING YOUR PROJECTS
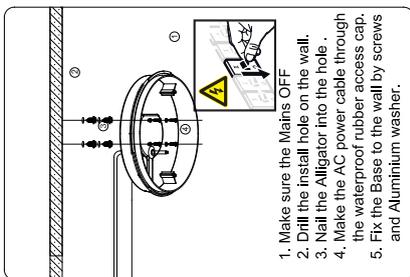
OTC
Original technology
Creating the life

INNOVATING YOUR PROJECTS

**Caution**

1. All OTC LED bulkheads are designed for projects. Only qualified electrician can install or maintain it.
2. The mains have to be off during the installation or maintenance.
3. Keep the product far from heat sources and in a well ventilated area.
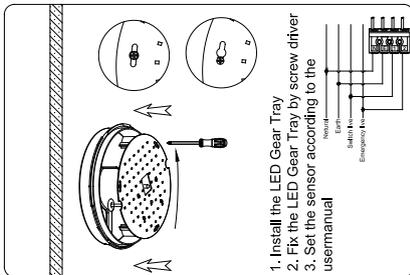
## Installation

**STEP 1**

1. Make sure the Mains OFF
2. Drill the install hole on the wall.
3. Nail the Alligator into the hole .
4. Make the AC power cable through the waterproof rubber access cap.
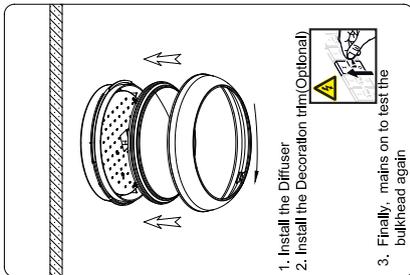5. Fix the Base to the wall by screws and Aluminium washer.

**STEP 2**
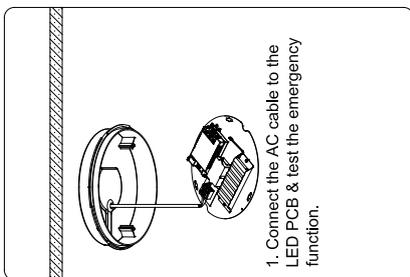
1. Connect the AC cable to the LED PCB & test the emergency function.

**STEP 3**

1. Install the LED Gear Tray
2. Fix the LED Gear Tray by screw driver
3. Set the sensor according to the usermanual

Neutral
Earth
Switch live
Emergency live

**STEP 4**

1. Install the Diffuser
2. Install the Decoration trim(Optional)

3. Finally, mains on to test the bulkhead again

## Luminaire emergency inspection record

| month | Test | First Year | | Second Year | | Third Year | | Fourth Year | | Fifth Year | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Signed | Date | Signed | Date | Signed | Date | Signed | Date | Signed | Date |
| 1 | Functional | | | | | | | | | | |
| 2 | Functional | | | | | | | | | | |
| 3 | Functional | | | | | | | | | | |
| 4 | Functional | | | | | | | | | | |
| 5 | Functional | | | | | | | | | | |
| 6 | 1 hour | | | | | | | | | | |
| 7 | Functional | | | | | | | | | | |
| 8 | Functional | | | | | | | | | | |
| 9 | Functional | | | | | | | | | | |
| 10 | Functional | | | | | | | | | | |
| 11 | Functional | | | | | | | | | | |
| 12 | 3 hours | | | | | | | | | | |

Installed By:

Installed Date:

Luminaire NO.:

Luminaire Locaton:

Contact details: